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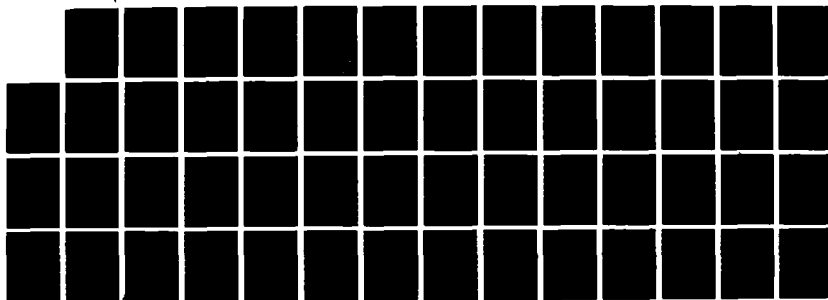
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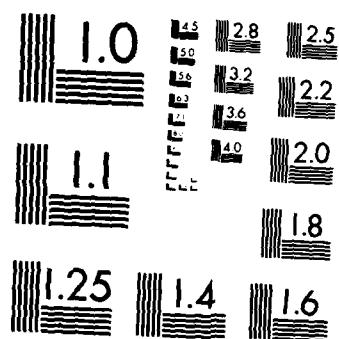
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Use Of A Marine Amphibious Force As A Field Army or Army Group
Operational Reserve.

AD-A188 224

by

Major John F.W. Caldwell
Infantry

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School of Advanced Military Studies
United States Command And General Staff College
Fort Leavenworth, Kansas 66027-6960

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14 May 1987

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School of Advanced Military Studies
Monograph Approval

Name of Student: Major John F.W. Caldwell

Title of Monograph: Use Of A Marine Amphibious Force As A Field Army
or Army Group Operational Reserve.

Approved by:

Larry Izzo

Lieutenant Colonel Larry Izzo, M.S.

Monograph Director

Richard Hart Sinnreich

Colonel Richard Hart Sinnreich, M.A.

Director, School of
Advanced Military Studies

Philip J. Brookes

Philip J. Brookes, Ph.D.

Director, Graduate Degree
Programs

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ABSTRACT

Use Of A Marine Amphibious Force As A Field Army or Army Group Operational Reserve.

by Major John F.W. Caldwell, USA, 40 pages.

The intent of this monograph is to analyze whether a Marine Amphibious Force (MAF) is suitable to function as an operational reserve for an echelon above corps (EAC) headquarters. In conducting this analysis the structure of a MAF is dissected to provide its composition and capabilities. A historical example is then studied to describe any synergistic effects the Marine air/ground team has on the enemy. Finally, the advantages and disadvantages of a MAF as an operational reserve are examined during both offensive and defensive operations.

The author concludes that should a MAF be available for commitment to sustained ground combat its use as an operational reserve for an EAC commander is an excellent use of its fighting capabilities. Its employment could well mean the difference between defeat or victory during the early stages of a war. With much of a potential MAF already loaded and at sea the possibility of a MAF fighting ashore for sustained periods grows as the defense budget shrinks.



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I. INTRODUCTION

A general war with the Soviet Union is a worst case scenario for the United States. A major conventional war would quickly tax the ability of the Armed Forces to end the war on terms favorable to the United States. One of the major reasons is that the U.S. Army has only eighteen regular divisions and nineteen reserve divisions. Possible sources of reinforcement are the three regular and one reserve Marine Amphibious Forces (MAF) used for sustained ground combat. These large self-contained fighting forces could mean the difference between victory or defeat during the early stages of a war. Having its own Air Wing, each MAF contains a much greater amount of organic combat power than an Army division.¹

If Marine Amphibious Forces were available for sustained ground combat operations more time could be secured for mobilization by the United States. This could also relieve the pressure on the National Command Authority to use nuclear weapons. The problem is that Army officers as a whole have difficulty in understanding the uses and capabilities of a MAF and also how to integrate and fight it within an Army organization such as a field army or army group.

The intent of this monograph is to analyze whether a MAF is suitable to function as an operational reserve for an echelon above corps headquarters. In conducting this analysis the structure of a MAF will be dissected to provide its composition and capabilities. A historical example will then be studied to describe any synergistic effects the Marine air/ground team has on the enemy. Finally, the advantages and disadvantages of a MAF as an operational reserve will be examined during both offensive and defensive operations.

The USMC gets its missions and basic structure from the National Security Act of 1947. The act states:

"The Marine Corps, within the Department of the Navy, shall be so organized as to include not less than three combat divisions and three air wings, and such other land combat, aviation, and other services as may be organic therein. The Marine Corps shall be organized, trained, and equipped to provide fleet Marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. In addition, the Marine Corps shall provide detachments and organizations for service on armed vessels of the Navy, shall provide security detachments for the protection of naval property at naval stations and bases, and shall perform such other duties as the President may direct. However, these additional duties may not detract from or interfere with the operations for which the Marine Corps is primarily organized."²

It is the phrase "...and such other duties as the President may direct," that would allow an operational level headquarters to employ a MAF during sustained ground combat operations.

The purpose of any reserve is to preserve the commander's flexibility.³ Therefore, what are the requirements for an operational reserve at echelons above corps? The first of six requirements is Command and Control. As stated in FM 100-5, Operations:

"...the only purpose of command and control is to implement the commander's will in pursuit of the unit's objective. The system must be reliable, secure, fast, and durable. It must collect, analyze, and present information rapidly. It must communicate orders, coordinate support, and provide direction to the force in spite of enemy interference, destruction of command posts, or loss and replacement of commanders."⁴

Agility for a reserve force is a second requirement. An operational reserve must be fully capable of quickly changing the main effort with little delay and with a minimum need for further coordination and/or a task organization change. Requirements three, four, and five are the dynamics of combat power: Firepower, Maneuver, and Protection. The reserve force must be able to defeat the enemy's ability and will to fight with destructive force (firepower), to "...

gain advantage of position before battle and to exploit tactical successes to achieve operational results" (maneuver), and finally to provide for the "... conservation of the fighting potential of a force so that it can be applied at the decisive time and place" (protection).⁵

Sustainability of the reserve is the last requirement needed to preserve the commander's flexibility. For the reserve unit "... sustainment includes all the combat service support (CSS) activities necessary to support battles and engagements and the tactical activities which precede and follow them."⁶

These six requirements of an operational reserve at echelons above corps will be used throughout this monograph to determine whether or not a MAF can function as an operational reserve. If the MAF meets most or all of these requisite fundamentals then the commander's flexibility will be retained and the MAF can be an option as an operational reserve.

For the purpose of this monograph there will be only one limitation. The MAF in this study will be considered only during sustained ground combat operations. The Navy and the Marine Corps view this type of employment as the least likely to happen. Nevertheless, aspects of MAF ability to conduct sustained ground combat operations should be examined and understood in this day of scarce ground combat units for the United States.

II. COMPOSITION AND CAPABILITIES OF A MAF

A MAF is the basic element that the Marine Corps employs during both amphibious operations and sustained land combat operations. It is the largest Marine air-ground task force (MAGTF) that is fielded. Usually, it is constructed around a MAF headquarters, a reinforced Marine division, a Marine aircraft wing(MAW), and a force service support group(FSSG).⁷

While a notional MAF (consisting of a HQ, Division(+), MAW, and FSSG) is used in this study, the actual composition is not set in concrete. Rather, the three regular Marine divisions, three air wings, and three force service support groups provide a pool of well trained men, units, and equipment that can be task organized based on the factors of mission, enemy, terrain, troops, and time(METT-T).⁸

The MAF headquarters provides the command and control for the force. Normally commanded by a major or lieutenant general, this element has the same basic general staff structure as an Army staff. It will have the necessary planning staff and communications equipment to exercise command of all elements of the MAF and any joint attachments. Support outside the headquarters and headquarters company comes from separate units assigned to the MAF. These consist of:

MAF HQ and HQ Service Company

Radio Battalion

-Mission: To conduct tactical signals intelligence, ground EW, and communications security monitoring in direct support of the MAF.

-Additionally it provides special intelligence communication support for the force headquarters. Smaller teams may go to both the division and wing if required.

Counterintelligence Teams

Force Reconnaissance Company

-Mission: To provide deep human intelligence collection and reconnaissance for the MAF commander.

Air/Naval Gunfire Liaison Company(ANGLICO)

-Mission: To support U.S. Army or Allied division by providing the control and liaison agencies associated with the control and employment of naval gunfire and naval/Marine close air support.

Separate Brigade Platoons

-Mission: Same as the ANGLICO except it works with separate brigades.

Communications Battalion

-Mission: To provide the communications facilities for the MAF HQ and subordinate units and specialist teams as required to divisions or wings.

Command and control for the MAF is available and clearly by TO&E gives the commander the necessary tools to command the MAF. It would also appear that the MAF HQ is prepared to command and control joint forces as required.⁹

The next major component of the MAF is the Force Service Support Group. The FSSG is an organization that compares in function and responsibility with an Army corps support command(COSCOM). Each of the three regular FSSGs are designed to support one notional MAF (approximately 52,300 Marines and sailors). Yet, with only 687 officers and 9,497 enlisted men (both Marine and Navy), the FSSG is not as large as a COSCOM designed to support a comparable Army combat force. One reason is that the Marine division is a much lighter force in terms of total ground mechanization and firepower (as will be shown later in this section). Another reason is that the Marine Corps has taken a calculated risk that all of its MAFs will not be committed to combat at the same time. Thus, it would be able to shift support units, as needed, to cover the logistical shortages. Finally, the MAW has a large amount of its own CSS organic to its force structure. These three reasons mean fewer and smaller combat service support units.

The FSSG supports all the elements of the MAF with sustained CSS.

This FSSG base includes:

- Command, control and execution of both general and direct support missions. ie. A HQ & Service Bn and a Supply Bn
- Engineer support. ie. Engineer Support Bn
- Motor transport support. ie. Motor transport Bn
- All intermediate maintenance support. ie. Maintenance Bn
- Medical and dental support. ie. A Medical and a Dental Bn
- All types of terminal operations. ie. Landing Support Bn¹⁰

The FSSG will normally deploy with sixty days of all classes of supplies. The usual distribution is for fifteen days to move with the assault elements(AE) and forty-five days to arrive with the follow-on echelon. If the MAF is committed to sustained ground combat with Army forces the Army and Air Force become the suppliers of all common classes of supply once the first sixty days' are consumed.¹¹

The next MAF unit is the ground maneuver element. Notionally it is a reinforced division. This element consists of:

Headquarters Battalion

- Provides the necessary command and control (equipment and personnel), the CSS for organic divisional elements, sufficient GS motor transport to provide limited logistical support and limited tactical mobility and finally military police support.
- The truck company can lift assault elements of two infantry battalions simultaneously.

Infantry Regiment X 3

- Mission: The primary mission is to locate, close with, and destroy the enemy by fire and maneuver, or to repel his assault by fire and close combat.

Artillery Regiment

- Mission: To provide fire support to the division during the amphibious assault and subsequent operations ashore.
- This regiment is equipped to provide both DS (105mm & 155mm) and GS (155mm & 203mm) support to the division. A total of 144 pieces of artillery are available to the division commander.

Reconnaissance Battalion

- Mission: To conduct ground reconnaissance and surveillance through stealth, maneuver and rapid reporting.

Tank Battalion

- Mission: To provide combat power to the division during the amphibious assault and subsequent operations ashore utilizing fire and maneuver, mobility, armor protected firepower and shock action to close with and destroy the enemy.
- This battalion also has the division antitank company consisting of 72 wheeled vehicle mounted TOW weapons systems.

Assault Amphibian Battalion

-Mission: To transport the surface assault elements of the landing force from amphibious shipping to inland objectives in a single lift during the amphibious assault, to provide support to mechanized operations ashore and to provide combat support for other operational requirements.

-The battalion can move the assault elements of five infantry battalions simultaneously.

Combat Engineer Battalion

-Mission: To render close combat engineer support during all combat operations.

Light Armored Vehicle Battalion(LAVB)

-Mission: To locate, close with, and destroy the enemy by fire and maneuver, exploiting high mobility, agility and firepower, and to conduct reconnaissance, security and economy-of-force missions as may be required.¹²

All of these forces give the Marine division a wide range of mission capability and flexibility. Organic to the division is the transportation to move concurrently the combat elements of seven infantry battalions, supporting armor, artillery, engineers, LAVB and the antitank company. This leaves only two infantry battalions and most of the logistical elements to be moved. Because almost all of the divisional units are transportable by helicopter the MAF can provide the remainder of the needed mobility.

The MAF is the final element of the MAF. Functioning as an integral part of the MAF, the air wing provides close air support (CAS), defensive counterair (DCA), offensive counterair (OCA), air reconnaissance, electronic counter-measures, command and control, air cargo and vertical lift support. The wing also employs and integrates surface to air missile (SAM) fires to support the MAF. The rotary wing elements can lift approximately one-third of the division at a time and support the assault with helicopter gunships. With its own fighter, light attack, attack, aerial tanker, reconnaissance, electronic counter-measures (ECM), cargo and forward air controller aircraft, the MAF can furnish the massive, accurate and responsive

firepower that the MAF needs during sustained ground combat operations.¹³

Marine aviation is designed to be an expeditionary supporting arm. Therefore, even though the FSSG does provide some support, the wing is equipped to provide most of its own combat support and combat service support. The wing is fully at home operating from the deck of a navy carrier, an austere forward airbase or even small unimproved strips for its helicopters and HARRIERS.

If committed to sustained ground combat operations as an operational reserve the MAF would need support from the Army successfully to conduct combat operations. This support would come from the three standard areas of combat arms, combat support and combat service support. The exact support would depend on METT-T but the following types provide a start point to consider for planning purposes.

Combat arms support would start in the form of air defense artillery (ADA). This support would be automatic for area coverage since the Army would already be covering Army owned terrain. What the MAF would need is low altitude point coverage. The MAF is protected by only STINGERS and HAWKS in this area. Both CHAPARRAL and VULCAN units would be needed to thicken the air defense umbrella over the ground maneuver element. It must be remembered that with the MAF as an operational reserve the enemy commander would strive to discover, target, disrupt and delay its employment. Fixed wing and rotary wing assets would be the enemy's quickest and deadliest attack means.

Engineer support would be another MAF requirement. Both the maneuver division and the FSSG would need additional combat and combat

heavy engineers. Marine engineers are basically light assault type troops. Required mobility, survivability and counter-mobility tasks would quickly tax the resources of the divisional combat engineer battalion. For example, there are no armored vehicle launched bridges (AVLB) in the MAF. The FSSG engineer support battalion is only fielded to construct forward, austere airfields and helicopter operating bases. It does have one bridge company (equipped with fixed and floating assets), but the battalion as a whole is not designed or trained for heavy combat engineer tasks.

The next support required by the MAF would be chemical and intelligence units. Like the Army, the MAF has the minimum necessary personal training and equipment for chemical protection and decontamination. However, the Army has started to form and field corps level chemical brigades and divisional chemical defense companies. These type units would be needed by the MAF to conduct operations and reduce their risk to chemical destruction. Whether smoke companies would be needed would depend on the situation.

Once the MAF was committed as an operational reserve the input of and requirement for intelligence would greatly increase. The MAF HQ and its subordinate HQs are able to acquire and analyze raw data from their organic collectors, naval collectors and national assets. However, once joined in a sustained operation the input from all the joint (and possibly combined) collectors would overload the ability of Marine intelligence units to receive, analyze and forward to the division and wing vital information in a timely manner. Parts of an all source intelligence center (ASIC) would need to support the MAF to integrate inputs from the Army component and to forward Marine

intelligence to Army users. It is as much a technical problem as a manpower one. The Army ASICs are very automated and the MAF does not possess all the critical vans, troops, signal gear, etc. to interface with the Army.

Combat service support units are the final Army support to a MAF. Without question ammunition, fuel, medical, transportation and supply and services units would be required. The main reasons are that the FSSG is designed to operate close to naval support and can only support itself about one hundred and fifty miles forward of its rear boundary. The MAF is very dependent on the navy for storage and issue of all types of supplies and for hospital support. Additionally, the sustained combat, depth of operations and possible Army attachments would strain the capabilities of the carefully tailored FSSG to store supplies, transport supplies, issue supplies and repair equipment. Thus, the Army must supply common classes of supply, provide transportation units to move the additional tonnages and support the MAF with needed medical support. The MAW would also need logistical support from the Air Force in terms of common supply items.¹⁴

The next question is how the MAF compares to both an Army air assault division and a heavy division. The six requirements for an operational reserve will be the basis for comparison:

- Command and Control
- Agility
- Firepower
- Maneuver
- Protection
- Sustainability

During normal ground and rotary wing maneuver and combat operations all three units have basically the same staff systems and communications suites for command and control. The differences are in

the areas of intelligence and employment of fixed wing aircraft. If the MAF is augmented with some ASIC support it then has the same intelligence interface support as a corps. Yet, the MAF's offensive and defensive EW assets are vastly greater than any Army division or corps. The fixed wing EA-6B PROWLER and RF-4B PHANTOM provide organic EW and aerial reconnaissance respectively. The MAW normally will provide quicker response to the MAF than the Air Force will to Army units. Granted, corps has its own propeller driven fixed wing intelligence mission platforms, but they are not nearly as survivable as jets nor do they have photo or jamming capability.

Command and control of air support is also greater for the MAF. The MAW mission is always the MAF mission unless the CINC intervenes. Army divisions cannot say the same in terms of air support. The MAF plan will always have first priority for Marine air and because the MAW is Marine; everyone talks and understands the same language. Finally, the MAF commander commands both the Marine division and the MAW. He knows well in advance how much air support he will have and can employ it totally to support the ground maneuver plan. Army units never know for sure until about 24 hours out what air support has been approved for their use.

Agility is another way to compare the MAF against Army air assault and heavy divisions. At the basic ground division level the Army heavy division is the most agile of the three divisions while engaged in combat. Being fully mobile in its own tanks, IFVs and APCs the heavy division is fully capable of quickly changing the main effort with a minimum need for further coordination and/or a task organization change. Additionally, its field artillery and logistics

are mobile enough to support the division during combat operations. The MAF and air assault division may require constant transportation changes if movement is required of units that do not have transportation with them when ordered to change missions. The reason is that the Marine and air assault infantry are foot mobile. Division or corps/MAF assets are needed to move the troops.

The comparison of firepower is won hands down by the MAF. The main reason is the MAW. With 108 fixed wing aircraft capable of delivering ordnance on the enemy the comparison is not even close. The average Air Force attack wing has 72 aircraft. The MAW is almost twice this size and locates its 40 close support HARRIERs as close as 30 miles to the FEBA for quicker reaction and better sortie generation.

AIRCRAFT COMPARISON

	Armored	Mechanized	Air Assault	Marine (MAF)
-----	-----	-----	-----	-----
Fixed Wing Aircraft	NA	NA	NA	
Close Spt				40
Ftr/Atk				48
Bomber				20
EW/Jam				8
Recon				8
Observation				12
Cargo/Tanker				12(KC-130)
Helicopters				
Cargo	0	0	32	48
Attack	44	44	88	24*
EW	3	3	3	0
Utility	30	30	160	84
Observation	50	50	91	0

*24 is one-third of the total active attack helicopters. 72 is the recognized minimum to properly support a MAF.¹⁵

The ground firepower figures do not look any better for Army units. The MAF arrives fairly heavy in artillery. While it is not all SP, the towed artillery is fully transportable by helicopter. The light armored vehicle (LAV) battalion mounts the same 25mm chain gun

as the M-2/3 and is fully transportable by Marine helicopters. The Marine division has 20% of the tanks and 46% of the TOWs compared to an armored division.

GROUND DIVISION COMPARISON

	Armored	Mechanized	Air Assault	Marine

COMBAT VEHICLES				
TANKS	348	290	0	70
BFV/CFV	276	330	0	0
LVPT-7	0	0	0	208
LAV	0	0	0	147
ARTILLERY				
HOW (TOW) 155	0	0	0	90
HOW (SP) 155	72	72	0	18
HOW (SP) 8"	0	0	0	12
HOW(TOW) 105	0	0	54	24
MLRS	9	9	0	0
TOWS(Launchers)*	312	390	188	144

* These figures only count TOW systems in ground maneuver battalions.¹⁶

Maneuver is an interesting area to try and compare on paper. There are two aspects to maneuver. First, there is the ability to gain an advantage before being committed to battle. Second is the ability to exploit tactical successes to achieve operational results. The first is critically important to an operational reserve. The potentially vast distances involved and the problem of the enemy trying to find and key on the reserve become important factors. The first aspect of maneuver is where the MAF and air assault division gain a distinct advantage over the heavy division. Their division bases, with less heavy equipment, are much easier to move. The heavy divisions must depend on rail or heavy equipment transporters (HET) to move great amounts of their units. If they do not use HETs and/or rail cars then the tanks, IFVs/CFVs, SP howitzers, etc. will require large

amounts of extra fuel and, more importantly, maintenance to move and then recover from the move.

The road and rail lines of communication (LOCs) are carefully monitored by the enemy and relatively easy to attack at key points. The MAF and air assault division, on the other hand, can almost completely self-deploy by air. They both use some road space and the MAF will need some additional transportation for its tanks, SP howitzers and LVPT-7s, but nothing like the heavy division. The MAW can almost completely self-deploy without any outside help because of its already mentioned expeditionary nature. The remaining vehicles of the MAF and air assault division are wheeled vehicles and will use less fuel and need less maintenance during road movement than tracked vehicles over similar distances.

All three type divisional bases are designed to exploit tactical successes to achieve operational results. The battle situation they find themselves in is going to be the key to this type of maneuver. An example would be if the air situation is such that large scale helicopter operations are difficult to execute. This would mean that the air assault division would be the least maneuverable, followed by the MAF. However, the MAF is the best equipped to avoid being forced into an unfavorable air situation. It has its own fighters that could try to cover a needed airmobile operation. The air assault division would have to depend on the availability of Air Force fighters. The MAF is fully equipped to explode tactical success into operational success. The capability of rapid movement by air of all combat arms coupled with the responsive MAW firepower means that the normal obstacles encountered by heavy forces (rivers, urban areas, nuclear

tree blow down, restrictive terrain) affect it much less. Also, the 208 LVPT-7s are fully amphibious (9mph in water) and a river or lake does not seem as big to a Marine unit as it might to an Army unit.

Once a breakthrough has been achieved a MAF pursuing or exploiting into the enemy rear has to cause an enemy commander the most uncertainty. Natural obstacles, clogged roads, enemy blocking positions and counterattacking forces give the MAF commander the options of fighting over all of the terrain and using his massed firepower on an enemy who is very unsure of the tactical or maybe even operational situation.

At the operational level the protection of the fighting force is extremely important because of the difficulty in forming and maintaining an operational reserve. Because the U.S. has few combat forces the decision to retain a large operational reserve is a tough one to make. Therefore, this force must be protected.

"Operational commanders...protect the force from operational level maneuver and concentrated enemy air support. Air superiority operations, theater wide air defense systems and protection of air bases are important activities associated with maximizing combat power...."Additionally, they "...ensure systems are in place for adequate medical care, expeditious return of minor casualties to duty, and preventive medicine. They protect stocks of supplies and ensure their proper distribution. They provide effective systems for maintenance evacuation and rapid replacement or repair of hardware. At times, they husband and ration supplies or enforce strict controls and priorities to ensure strength at the decisive time and place."17

If the operational commander is already executing the above mentioned missions then the moving of a heavy or air assault division into a operational reserve status only gives him more to protect. The arrival of a MAF into his theater of operations as his operational reserve is another matter entirely. The MAF brings its own air and ground defenses and logistical support. The MAF can start immediately defending (with jets and ADA) the MAF and everything else around its

area of operations. As long as the MAF is not committed to ground combat and is in fairly static reserve positions the rotary wing assets may help in the logistical supply effort of the army or army group. Finally, the operational commander may want to use MAW aircraft in air superiority operations. He must be very careful in this type employment because of his future plans for the entire MAF. The MAF is an air/ground team that functions best as an all Marine unit. Extensive losses to the MAW during air superiority operations may endanger the later employment of the MAF in ground combat missions.

Sustainability for an operational reserve considers not only what the reserve consists of, but also from where it will come. The main reason is that whatever force is used must come to the theater from the U.S. This means that some type force has to be given up for something else. Just from the charts and figures already presented the shipping and air flow needed to move the MAF forward could possibly move an Army corps headquarters, field artillery brigade, the best part of an air assault division, the best part of a heavy division and part of a corps support command (COSCOM). The Air Force could also probably fly a fighter wing to the theater.

Part of the sustainability answer is that the cost of moving a MAF forward is not as much as moving like Army and Air Force units. The Marines already are equipped with some shipping (assault and conventional) that is with them on a daily basis. This would be available to move part of the MAF. The U.S. has also purchased and fielded three naval squadrons of ships called the Maritime Prepositioning Ships (MPS). Located around the world at three different locations each squadron carries the equipment and thirty

days of supplies for one Marine Amphibious Brigade (MAB). While a MAB does not exactly equate to one-third of a MAF it does make up a major portion. Because of these two groups of shipping the MAF could be assembled and shipped for much less shipping than would be required for an Army and Air Force team of the same size and combat power. It might even happen quicker depending on where in the world they were needed. It is unlikely that the current Marine shipping would be unloaded to make room for Army and Air Force equipment. Thus, additional shipping would need to be found to ship the necessary extra amounts of Army and Air Force equipment to form an operational reserve.¹⁸

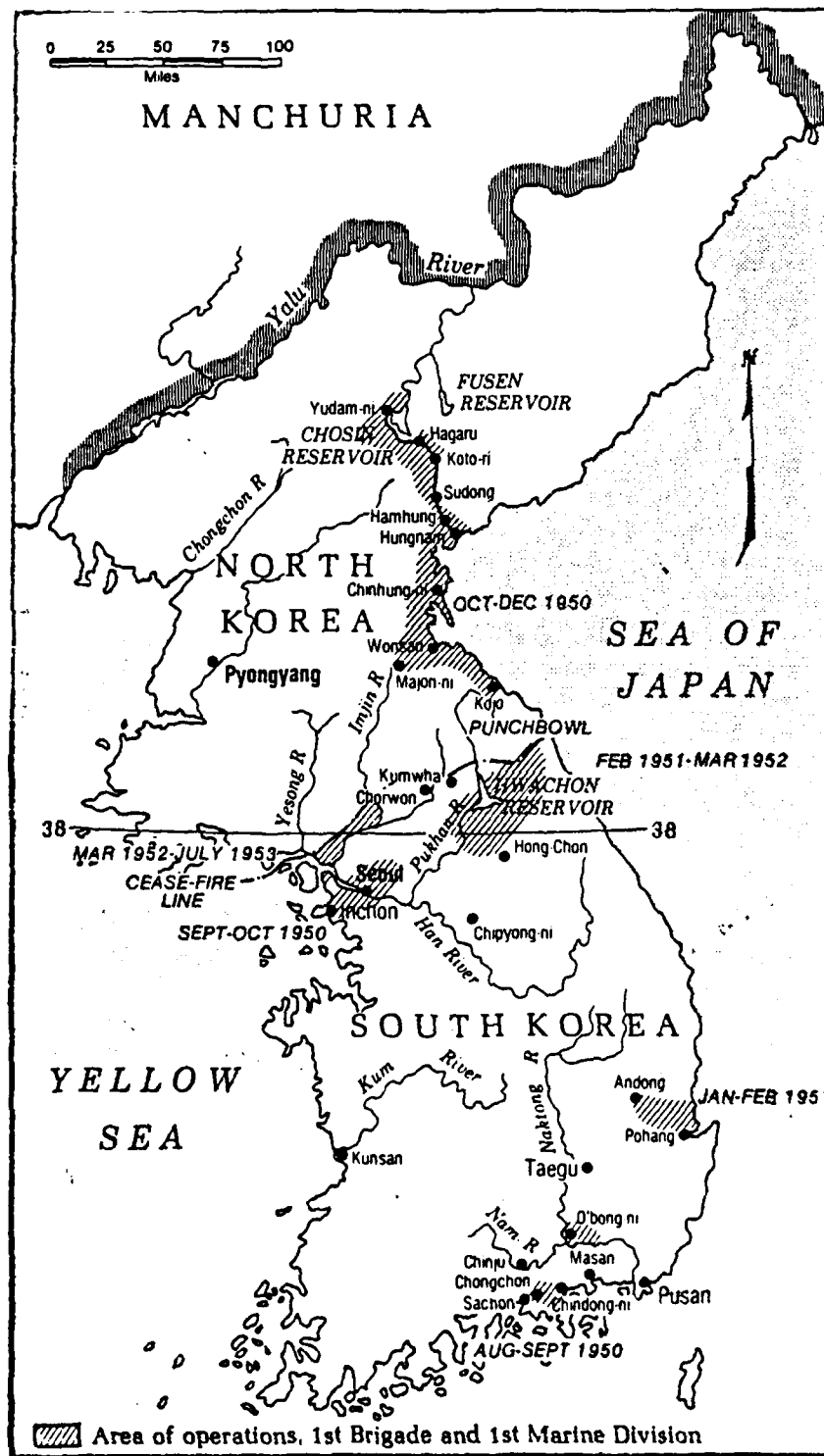
The next part of the sustainability question is whether the air assault division, heavy division or Marine division have the CSS units to support battles and engagements and the operational/tactical activities which precede and follow them. The Army divisions and mature Army corps have the necessary CSS to meet the requirement. As stated earlier, the MAF would need CSS (and CS) support to conduct sustained ground combat operations. Of course, the MAF would not need a COSCOM to support it. Its own FSSG would just need augmentation. Ideally, the operational commander must look at the FSSG as being the foundation for a new COSCOM type unit. That way he could build around the FSSG instead of starting a new COSCOM from the ground up. Best of all, the FSSG was shipped to the theater 'on the cheap' because of the Marine pre-packaged shipping. Any Army unit pulled out of combat to form a reserve would still have to be supplied. Not as much as if they were in combat, but still supplied nevertheless.

III. HISTORICAL EXAMPLES OF A MAGTF IN THE KOREAN WAR

The 1st Marine Division, 1st Marine Aircraft Wing and 1st Combat Service Group during the Korean War were the forebears of today's MAF organization. These three units will be studied during operations from the Chosin reservoir to the Hungnam evacuation (November 1950 to December 1950) and during the sustained ground combat operations of these units with Eighth U.S. Army (February to September 1951). The purpose of the historical study is to show clearly that the USMC is capable of conducting sustained ground combat operations and to describe any synergistic effects the Marine air/ground team has on an enemy.

1st Marine Division(+) found itself north of the Chosin reservoir, near Yudam-ni, on the night of 27 November 1950. It was here because General MacArthur (Commander in Chief United Nations Command, CincUNC) had committed X Corps (US) to an exploitation operation into North Korea. X Corps (1st Marine Div and 7th Inf Div) had started redeployment by sea from north of Seoul around 7 October 1950 to Wonsan and Iwon, North Korea. Major U.S. units were ashore by the end of October. Once ashore, X Corps also assumed command of two Republic of Korea (ROK) divisions (3rd and Capital) and 3rd Inf Div (US). As the corps deployed northward 1st Marine found itself the left flank unit for X Corps. The other divisions, except for 3(US) were deployed abreast of 1st Marine and exploiting north towards the Chinese/North Korean border. 3(US) was employed guarding Wonsan and patrolling between the open flank of 1st Marine and Eighth Army. This meant that X Corps was advancing on a front of approximately 200

MARINE OPERATING AREAS



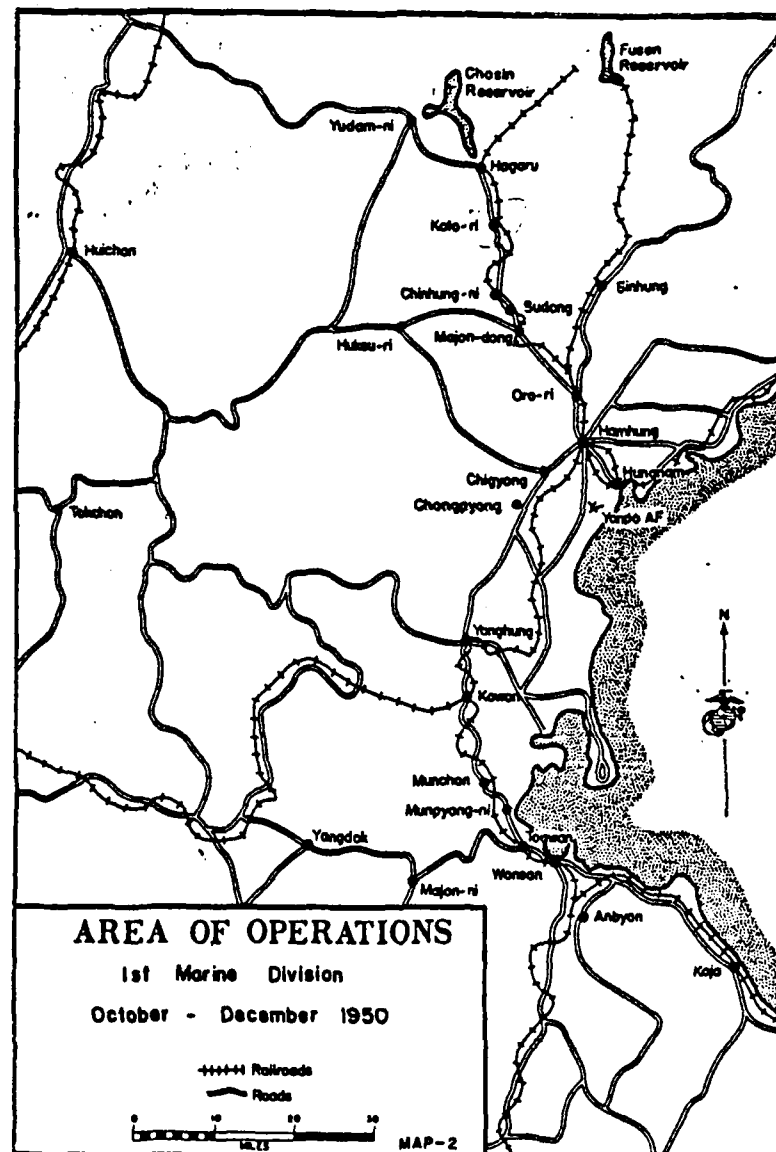
miles. 1st Marine had no contact with any unit of Eighth Army on its left flank and in fact X Corps was far in advance of Eighth Army.¹⁹

This exposed corps flank presented the Chinese Communist Army (CCA) an excellent opportunity. The CCA planned to "...smash the Eighth Army's right flank, isolate X Corps, and defeat both in detail."²⁰ While two regiments of 1st Marine were concentrated northwest of the Chosin reservoir the remainder of the division was stretched out along forty-five miles of mountain road south to Chinhung-ni. "...the CCA Ninth Army Group planned simultaneous attacks, with other units blocking the main supply route (MSR) between the Marine units. By annihilating MacArthur's crack division the Chinese anticipated a stunning military and psychological victory."²¹

The series of engagements between 27 November and 10 December 1950 that made up the battle of the Chosin reservoir started with a night attack against the 5th and 7th Marine Regimental Combat Teams (RCT) at Yudam-ni. The CCF committed three infantry divisions to the destruction of the two RCTs. Following what was to become classic CCF tactics CCF divisions attacked the Marines at Yudam-ni while a third division conducted an envelopment to interdict the MSR and only route back to the major divisional logistics base at Hagaru-Ri. The RCTs fought for two days before being ordered to withdraw to Hagaru-Ri. They started the withdrawal on 1 December and the last units arrived in the perimeter at Hagaru-Ri early afternoon on 4 December. The Marines suffered over 3,000 casualties while inflicting over 12,000 casualties on the enemy.²²

During this entire period 1st MAF gave superb support. Flying from both land based locations near Wonsan and Navy carriers, the six

CHOSIN RESERVOIR AREA OF OPERATIONS



Marine squadrons flew literally hundreds of close air, reconnaissance and supply sorties. On 3 December alone, 145 CAS sorties were flown for 5th and 7th RCTs. This CAS was in addition to the sorties being flown for other divisional units fighting in enclaves south along the MSR to Chinhung-ni and other units in X Corps. 1st MAF was also introducing the helicopter into the battlefield. Used extensively for moving vital supplies, medical evacuation and transportation, the helicopters provided invaluable service in the rugged mountainous terrain.²³

The fighting during the period 27 Nov to 4 Dec was not confined to the 5th and 7th RCTs. At Hagaru-Ri a rifle battalion(-), divisional support troops and various Army service units fought two more Chinese divisions to a standstill. Over 1,500 Chinese were known killed and another 7,050 estimated casualties. The total estimated friendly casualties were 700.²⁴

Between 4 and 6 December 1st Marine defended at Hagaru-Ri. With over 4,000 casualties and troops exhausted from days of combat a rest was required. This respite allowed the Air Force and Marine air not only to evacuate casualties and non-essential equipment but also to bring in needed supplies and replacements. Air from four Navy carriers was also on station to provide support.

On 6 December the Marines started their attack south towards Chinhung-ni and eventual seaborne evacuation at Hungnam. By 7 December 14,229 US and UK troops were at Koto-Ri eleven miles to the south. That eleven miles cost 1,600 casualties. By 10 December lead elements reached Hungnam with the remainder of the 1st Marine closing by 12 December.

The 1st MAW in conjunction with naval air flew 3,703 sorties in 1,053 missions to support X Corps during this critical period. CAS accounted for 599 of the missions.

CAS Missions for X Corps

468 for 1st Marine Division
 8 for 3rd Infantry Division
 56 for 7th Infantry Division
 67 for ROK Divisions

The remaining 454 missions were search and attack missions (read BAI for today). Additionally, Marine squadron VMO-6 flew 1,544 flights to support X Corps operations. This unit only had 25 officers, 95 enlisted men, 10 light fixed wing aircraft (8 OY-2s and 2 L5Gs) and 9 HO3S-1 helicopters. Support broke down into:

<u>Type Missions</u>	<u>#A/C</u>	<u>#Helicopters</u>
Reconnaissance	393	64
Transportation	130	421
Evacuation	29	191
Liaison	35	90
Artillery Spotting	39	0
Utility	26	60
Rescue	0	11

Most of this support also went to 1st Marine Division.

Final casualties for the Chinese were estimated at 37,500; this figure included about 25,000 dead. Enemy papers captured later broke these figures down to 15,000 KIA and 7,500 WIA by ground forces and 10,000 KIA and 5,000 WIA by air. The friendly casualties were 588 killed, 3,485 battle casualties, 192 MIA and about 4,338 non-battle casualties. Thus, 9th Army Group (CCA) lost about 50% of the twelve divisions (60,000+ men) it committed to destroy 1st Marine Division.²⁵

Once withdrawn from Hungnam 1st Marine Division was redeployed to Masan, South Korea. Except for some special troops the complete division was at Masan by 17 December 1950. The MAW was redeployed to three Navy carriers and bases in Japan and South Korea. Thus, while

the ground Marines took some much needed rest and refitting, the air wing continued to operate against the CCF and North Korean Peoples Army (NKPA) under the control of the Navy (on carriers) and Air Force (on land). The division reverted to control of Eighth Army and went into reserve.

By the second week in February 1951 the 1st Marine Division had been filled to 100% in troops, most lost equipment had been replaced (by the 2d Logistical Command, USA) and it had conducted a four week rear area combat operation to destroy guerrilla forces threatening I (ROK), III (ROK) and X (US) Corps MSR's. At the end of February 1st MAW was again located completely in Korea. This meant much quicker mission response times and more station time on target for the aircraft.

General Ridgway, the new Eighth Army commander, ordered the 1st Marine Division into sustained ground combat on 21 February. Before being committed the division was given increased support from the Army. Another artillery battalion, a truck company and some additional logistical units were added to help conduct sustained combat. However, throughout the remainder of the war transportation would always be a problem.²⁶

Assigned to IX Corps (US), 1st Marine Division fought for six weeks as part of 'Operation KILLER'. By 4 March the CCF had been pushed back 20 miles and the division had suffered 395 casualties. Of interest during the period 24 Feb to 5 Mar was the commanding of IX Corps (US) by Major General Oliver P. Smith (USMC). General Smith was commanding 1st Marine Division when the IX Corps commander died. This was only the third time a Marine officer had commanded a division or larger Army force in combat.

The army level offensive resumed 7 March with 'Operation RIPPER'. "The primary purpose of RIPPER was to inflict as many Communist casualties as possible, and by means of constant pressure keep the enemy off balance in his buildup for a new offensive." During this attack the Marines were reinforced by four battalions of the Korean Marine Corps (KMC). By 10 April PHASE LINE KANSAS was reached north of the 38th Parallel. At PL KANSAS the division was ordered to halt. During both operations the CCF and NKPA had been fighting delaying actions rather than hard 'tooth and nail' defensive combat. The expected offensive was not long in arriving.²⁷

On the night of 22 April 500,000 troops of CCF opened their long awaited fifth offensive. The enemy main effort was against the two western corps of Eighth Army, I and IX. 1st Marine Division as a result of being IX Corps left flank division felt most of the enemy pressure against its left. This pressure increased dramatically when the ROK 6th Division (on the 1st Marine left) was pushed rapidly to the south by the CCF on 24 April. The Marines were forced to refuse their left flank and commit all four regiments to the combat. Because other CCF penetrations threatened I Corps Lieutenant General James Van Fleet, Eighth Army's new commander, directed a general fighting withdrawal back to prepared defensive positions south of the Pukhang-gang river and north of Hongchon. The Eighth Army had learned that terrain was only retained to kill the enemy. By the middle of May the enemy offensive had clearly failed.²⁸

The MAW during this period was flying under Air Force control (more concerning this later). The results were that Marine aircraft flew for everybody. On 23 April 203 Marine air sorties were flown. 153

were CAS sorties, but only 42 went to 1st Marine Division; the remaining 111 went to ROK 6th Infantry (24), to I Corps (59) and 28 against CCF crossings on the Imjin river. This uncoupling did not mean that Navy and Air Force planes did not fly for the Marines. For example, from 1-23 May the fixed wing observation squadron (VMO-6) controlled 54 strikes involving 189 aircraft in 1st Marine Division's sector. 40% of these were non-Marine planes.²⁹

The enemy offensive failed badly. Eighth Army quickly ordered a counteroffensive to regain loss ground and more importantly pursue the beaten foe and destroy his army in the field. Because of a corps boundary change 1st Marine Division found itself back under X Corps for the counteroffensive. Until about 10 June going was fairly easy due to the disintegrating CCF Army. From 10-20 June the mountainous terrain and fresh NKPA troops forced the division to fight hard to finally occupy PL KANSAS again. Here the UN forces stopped attacking because of communist peace overtures.

The communists sought refuge from defeat at the truce table. This ruse gave the communist the critical time to reform, refit and reinforce. Finally, in late August, the UNC returned to the offensive to gain favorable terrain from which a future strategic defense could be carried out (if need be) and to bring the communists to negotiate in good faith. From 27 August to 20 September 1st Marine Division advanced through some of the worst terrain in Korea. Limited roads, bad weather and a determined enemy cost the unit casualties that exceeded even those of the Chosin operation. The ending of this X Corps offensive marked the end of Marine maneuver warfare during the Korean War.³⁰

From the enemy casualty figures during the Chosin operation the actions and immediate support of the MAW proved invaluable to the survival of the ground division. The air/ground team worked because of the close bond between the air and ground Marines, the training standards for the pilots in CAS missions, the forward air controllers (air and ground) being with each major unit and the necessary signal equipment to conduct CAS missions. These lessons learned from World War II had not been lost on the Marine Corps.

Problems concerning USAF and USMC air-ground operations and doctrine came to light after the withdrawal of the division to Masan, South Korea. The reason was that from this time on the Marines never again had control over their air wing. The USAF became the prime broker for all aircraft and air operations in Korea. "The problem had nothing to do with Marine doctrine or the 1st MAW's effectiveness, but rather was a matter of the character of the air campaign and the Air Force's system of managing close air support." The Far East Air Force (FEAF) believed that a ruthless air interdiction campaign on the enemy's supply lines would cause the most effect on the outcome of the war. Operation STRANGLE (as this campaign was called) did in fact slow the enemy's ability to move supplies south to his field forces. However, it also used almost all Air Force, Marine and Navy aircraft in or near Korea. This meant that the reduced numbers of aircraft available for CAS missions had to be closely monitored. The Air Force therefore controlled all aircraft through their Joint Operations Center (JOC).³¹

Once back into combat in South Korea the 1st Marine Division quickly found that not only were the numbers of aircraft reduced, but

that Marine air did not always fly the approved missions, that long delays became the rule rather than the exception and that Air Force airborne spotters were not nearly as accurate as Marine ground FACs. From 1-15 June 1st MAW flew 1,875 combat sorties. Of this total only 670 were CAS missions. The breakdown was as follows:

MAW Sortie Breakdown³²

Unit	Numbers
1st Mar Div	377
7th Inf Div	41
3rd Inf Div	31
25th Inf Div	28
Other	193

Another example was from 3-21 September when the 1st Marine Division was fully engaged in continuous close combat. During this time MAW planes were stationed as close as 50 miles from the front lines. The division FACs made 182 tactical CAS requests. Of these 127 were approved and flown. Only 27 missions arrived when needed. The average was just under two hours and in forty-nine missions the planes were over two hours late. Major General Thomas, the division commander, reported that "...many of the 1,621 casualties suffered...were due to inadequate close air support."³³

In both of these historical studies the forerunner of the MAF conducted sustained ground combat operations in a superb manner. The key points that stand out in respect to this study are:

Key Points

- The operational mobility (sea lift) was superb.
- Marine air/ground team should be split only in an emergency.
- MAW was well suited for CAS.
- MAW was well suited for C², logistical, and medical evacuation.
- The MAW did not serve the Marine division as planned when under AF control.
- The division needed Army augmentation to conduct sustained ground combat.

- The equipment of the USMC and USA need to be as interchangeable as possible.

- The division element served well with both a corps and army level HQ.

IV. WHAT ARE THE ADVANTAGES AND DISADVANTAGES OF A MAF AS AN OPERATIONAL RESERVE?

When examining both the advantages and disadvantages of a MAF as an operational reserve the latter's possible missions must be established. Broken into two major areas these missions are:

Offensive operations

1. Weight the main effort
2. Exploit success
3. Maintain momentum
4. Counter Enemy counterattacks
5. Provide security
6. Complete destruction of enemy forces
7. Secure deep objectives

Defensive operations

1. Conduct Counterattacks
2. Exploit enemy vulnerabilities
3. Reinforce forward defensive operations
4. Block penetrating enemy forces
5. Counter threats to the rear area³⁴

Using the matrices that follow, the various missions can be compared to the six requirements for an operational reserve.

OFFENSIVE OPERATIONS

	C2	Agility	Firepower	Maneuver	Protection	Sustainability
Weight the Main Effort	+	+	0	-	-	-
Exploit Success	+	+	+	+	-	0
Maintain Momentum	+	+	+	+	-	0
Counter Enemy Counterattacks	+	0	0	+	-	-
Provide Security	0	0	+	-	-	--
Complete Destruction of Enemy Forces	+	+	+	+	0	0
Secure Deep Objectives	+	+	+	+	-	-

+ = Advantages
 - = Disadvantages
 0 = Neutral

During offensive operations the advantages of a MAF are strongest during missions to exploit success, maintain momentum, complete the destruction of enemy forces and in securing deep objectives. In all of these missions C², agility, firepower and maneuver are advantages for the MAF. C² for all four is very redundant. Because of the wide range of organic air and ground collection assets and the very flexible means of ground, helicopter (UH-1N) and fixed wing (C-130) command posts (CP) the MAF commander is better able to ensure success during these missions. These four missions normally already have the enemy at a disadvantage before the reserve is committed. This means that the enemy ADA system is not operating at peak efficiency. Its units are shot-up, moving and/or disorganized. It becomes easier for the MAW to operate in support of the MAF. When this happens the agility, firepower and maneuver of the MAF increase dramatically. The integrated firepower from the ground and air becomes easier to mass and focus against targets. The enemy is further disrupted and confused from the losses and shock effect of this firepower. The MAF agility and maneuver likewise are increased. As the enemy weakens the need for further coordination and/or ground task organization change decreases. Maneuver by foot, truck, amphibious tractor, LAV, tank, helicopter and even C-130 are facilitated.

The disadvantages during all four missions are in the areas of protection and sustainability. The part of protection that is always a problem is that the MAF ground force is basically an infantry force fighting a highly armored or mechanized force. Even though it has LAVs, LVPT-7s and a large tank battalion (70 tanks), it still lacks the large amounts of tanks, infantry fighting vehicles (IFVs) and

armored engineers needed to protect the force if firepower and maneuver fail. The MAF does have some key advantages in terms of protection. First, the infantry unit is small and easier to hide from the enemy. Second, a large part of the MAF consist of vertical/short take off and landing (V/STOL) aircraft (e.g. HARRIERS) and helicopters that are not tied to airfields.

Sustainability is a problem for the MAF when its commander is forced to fight heavy, continuous, combat with an enemy who requires extensive agility, firepower and maneuver to be defeated. The reason is that the prime elements of maneuver for the MAF (trucks, helicopters and LVTP-7s) are also the only logistics transportation. When moving troops they are not moving the supplies or the support units to provide battlefield sustenance. When firepower is greatly employed the class III and class V requirements rise extremely fast.

For example, the AV-8A HARRIER can conduct a sortie rate (combat flight per plane) of 2.3 per day. Making a vertical take off it carries 2,500lbs of ordnance and 2,800lbs of fuel. There are 40 HARRIERS assigned to a MAF. If 32 HARRIERS (80%) are flying every day at maximum rates then 92 tons of ordnance and 103.04 tons of fuel are expended every day just on the HARRIERS (it should be noted that the AV-8B entering service now increases the payload/range by 100%).³⁵

It is a vicious circle that can only be sustained for short periods of time by a MAF.

The remaining three offensive missions all seem to be missions that the MAF might have more trouble accomplishing. The missions of weighting the main effort and countering enemy counterattacks are the harder of the three to evaluate. C², again, is not a problem area because the MAF will be fairly concentrated when conducting any support to the main effort or blunting any enemy counterattack. Agility can be maintained by the force as it weights the main effort.

When supporting the main effort (a deliberate attack) advanced coordination and planning minimize the need for further major coordination or extensive task organization changes. Yet, the ability is in the MAF quickly to change the main effort if an opportunity presents itself to the operational commander.

In countering enemy counterattacks the problem becomes more difficult if the enemy achieves a measure of surprise during his attack. Once the ground regiments become task organized and engaged in combat they are slow to react in the reallocation of resources. Infantry will have to be disengaged from contact with the enemy, ground transportation, wheeled artillery and TOWs moved and the one tank battalion either massed and/or moved.

Firepower problems for these two missions are much the same. Because the friendly reserve is just adding its strength to the attack and not yet maintaining momentum or exploiting success the enemy may not yet be disrupted. His ADA system may still be intact, his air still potent and his artillery still capable of inflicting great damage. This means that MAF firepower may well be reduced. One reason is that only 20 tubes of the total 144 tubes of artillery available to the MAF are self-propelled. Therefore, counterbattery fires are more likely to neutralize Marine artillery. Another reason is that all of his ground mounted TOWs are transported by JEEPS, certainly not the most survivable means of employment. A third reason is that the MAW may have trouble flying both rotary and fixed wing ground support missions. The Israeli Air Force could not sustain its losses during CAS missions in 1973 until the the enemy ADA was suppressed.

Ordering the MAF to conduct security missions is an extremely risky decision. The MAF is not structured to be widely spread out in terms of its ground combat element. The more that the infantry regiments are spread out the harder they become to supply. Yet, at the same time, the more they need to keep ground or air transportation with them for quick reaction. This heavy demand on transportation, coupled with the extended sector means grave sustainability problems.

As mentioned earlier, most of the Marine artillery is towed and therefore difficult to reposition quickly. Helicopters can be used, but there are only sixteen CH-53E SUPER STALLIONS that can lift the M-198 (155mm) howitzers and their prime movers. This hurts agility and protection. Finally, the LVPT-7 is not an IFV. It is an amphibious tractor that is used as a large (it carries 25 men) battlefield taxi. It is not designed to fight a very fast, fluid, mechanized security mission.

	<u>DEFENSIVE OPERATIONS</u>					
	C2	Agility	Firepower	Maneuver	Protection	Sustainability
Conduct Counterattacks	+	+	+	+	-	0
Exploit Enemy Vulnerabilities	+	+	+	+	0	-
Reinforce Forward Defensive Operations	+	+	+	+	0	0
Block Penetrating Enemy Forces	+	+	+	0	-	0
Counter Threats to Rear Areas	+	+	+	+	+	+

+ = Advantages						
- = Disadvantages						
0 = Neutral						

In the five types of defensive operations above, the MAF seems able to conduct all without too much difficulty. In three of the cases the MAF will have time to think, plan, wargame and maybe even

rehearse its actions. These three operations are: conduct counterattacks, reinforce forward defensive positions and counter threats to rear areas. As an operational reserve the MAF would continually plan on any and all of the three missions. Since all three would involve the MAF operating inside of its own lines all or most of the time, the strengths of the MAF are greatly amplified. Its MAW is operating inside of the friendly ADA belt and needs to worry less about enemy ADA and aircraft. All types of transportation can be used tactically to move the Marine units with less of a threat. More importantly, more of the transportation can be used for longer periods of time because the logistical support will be easier and resupply distances shorter. With better planning, fire support, and maneuver the MAFs agility will be very advantageous. As mentioned earlier the 1st Marine Division in the Korean War conducted an extensive rear area protection operation during February 1951. Being a complete combined arms unit and very close to its logistical base at Masan the Marine division totally destroyed the NKPA 10th division during a four week period.

Exploiting enemy vulnerabilities is another excellent mission. If the enemy is already having problems the MAF is the unit of choice to attack him. Once more the effects of massed firepower with both mechanized and heliborne maneuver at the proper time and location may mean a positive difference for the operational commander's plans. The C² of the MAF can make this mission work exceedingly well. The MAF commander and staff are acquiring and analyzing intelligence data, then making decisions on it faster than a separate division could ever hope to replicate. Then, both the air and ground elements can be

correctly orchestrated against the enemy weakness. Since most enemy vulnerabilities will be fleeting this decision cycle and agility are of paramount importance.

Blocking an enemy penetration will be the hardest of the five to accomplish. The major reason is that at the operational level the initial positioning of the reserve may completely malposition it to block the penetration. It also must be assumed that because the enemy has effected a penetration big enough to demand the commitment of the operational reserve that he also has us at a disadvantage before the reserve is committed. This means that the our ADA system is not operating at peak efficiency. Our units are shot-up, moving and/or disorganized. It becomes easier for enemy air to operate in support of his forces. When this happens the agility, firepower and maneuver of the enemy force increases dramatically. The integrated firepower from his ground and air becomes easier to mass and focus against friendly targets. Friendly forces are then further disrupted and confused from the losses and shock effect of this increased firepower.

When this type operation happens the force moving to block the penetration must be one that can move quickly and yet have enough combat power to stop the enemy once contact is made. The enemy commander will be making every effort to keep his penetration going deep. The LOCs, airfields, logistics, etc. will be prime enemy targets. The MAF, as previously discussed, does not need the LOCs and airfields as much as other units. It should be able to react quicker to an operational threat even if malpositioned. The MAW should be able to better ride out enemy interdiction of its operating bases than the Air Force because of its expeditionary nature, equipment and HARRIERS.

The areas of protection and sustainability will be problems for the MAF or any other force conducting the mission. The Marines once more will face the delicate balancing act of maneuver versus sustainment. The force is also more exposed to enemy attack as it moves to the blocking positions because the MAF may now be the force that is unsure of the tactical and/or operational situation.

In summary, of the twelve possible missions for an operational reserve, the MAF's capabilities appear as follows:

Offensive operations

- o Weight the main effort
- + Exploit success
- + Maintain momentum
- o Counter Enemy counterattacks
- Provide security
- + Complete destruction of enemy forces
- + Secure deep objectives

Defensive operations

- + Conduct Counterattacks
- + Exploit enemy vulnerabilities
- + Reinforce forward defensive operations
- o Block penetrating enemy forces
- + Counter threats to the rear area

+ = Advantageous - = Disadvantageous o = Neutral at best

When using the six requirements that an operational force needs to display to be successful (C², agility, firepower, maneuver, protection and sustainability) the MAF stands out in having large advantages during eight of the missions. Three of the missions are at best neutral and one (provide security) is very risky.

During the Korean War the MAGTF showed how much the air/ground doctrine hurt the enemy. Whether it was securing a deep objective like Inchon, trying to exploit success by being deployed north of Wonsan towards the Yalu river or maintaining momentum during the spring and

summer UNC offensives the MAGTF showed its ability to conduct successfully sustained ground combat.

V. CONCLUSION

During the first four sections of this study a notional MAF was examined and evaluated to determine if it could function as an operational reserve for an echelons above corps (EAC) commander. Since a basic premise of any reserve is to preserve the commander's flexibility, the bottom line is whether the addition of a MAF as an operational reserve will preserve the EAC commander's flexibility. The answer is YES.

A MAF is able to conduct sustained ground combat operations and function as an operational reserve. However, the Army will have to provide the MAF with the extra support needed successfully to conduct combat operations. This support would come from the three standard areas of combat arms, combat support and combat service support. The exact support would depend on METT-T, but as a minimum the following types must be considered for planning purposes.

Army Support to MAF

- Air defense artillery
- Combat and combat heavy engineers
- Chemical defense units
- Limited intelligence augmentation
- Combat service support units
 - Ammunition
 - Medical
 - Supply and Service
 - Transportation

As seen from the Korean War once the MAF is committed to sustained ground combat operations it needs extra support. If for any reason the full MAW fails to arrive with the MAF then even more combat arms and transportation support would be needed. The reason is that

the MAW supplies such large portions of firepower, supply transportation and maneuver support that it would be difficult for the MAF to function as Marine doctrine and training envision it doing.

In evaluating the MAF it became clear that it is much more than an Army corps HQ and COSCOM, with one division assigned. The MAF is a unit that combines the best of several units to create a synergistic effect on any enemy. The division(+) base has three rifle regiments with nine rifle companies of 173 men each, a total of 1,557 company level fighters in each regiment. An Army heavy division brigade has a maximum of 963 with three mechanized infantry battalions. A Army air assault brigade fields 1,188 company level fighters. The point of this is that the MAF has 23% more infantry than any Army division! Yet, at the same time it supports its infantry with 70 tanks, 144 tubes of artillery, 208 LVPT-7s, 144 TOWS and 147 LAVs. The 19,528 Marines in the division(+) base have more than enough combat power to give even an Army heavy division fits in favorable terrain.

The USMC has not forgotten that World War II and combat in Korea demonstrated the vital need for air support. Hence, the Marine Air Wing's added rotary and fixed wing combat power. The MAW adds 48 heavy cargo helicopters, 60 troop helicopters, 24 utility helicopters and up to 72 attack helicopters. This is more than enough to lift and escort the assault elements of one regimental combat team in one lift. This is about the same as one Army air assault brigade. The difference, of course, is listed in the preceding paragraph. The remainder of the Marine division can move in fully tracked and amphibious carriers (LVPT-7s) to attack with or link up with the airmobile regiment. The Marines also have a choice of moving 105mm or 155mm artillery during

their airmobile operations. The air assault division does not own any 155mm howitzers. To support this mechanized/airmobile team the MAW can further commit 40 HARRIERS, 48 Fighter/attack planes and 20 bombers for fire support of the frontline Marines.

The MAF seems to equate to an Army corps HQ, six artillery battalions, the greater part of an Army heavy and air assault division, assorted corps combat support troops, a COSCOM and two task organized Air Force wings. Even this force does not show the inherent advantages that come with the MAF in terms of a single air-ground employment doctrine, one commander of ground and Air Forces and the esprit de corps that comes from all the MAF being habitually associated in training.

In view of the six requirements for an operational reserve, the MAF will enhance the EAC commander's flexibility.

- Command and Control
- Agility
- Firepower
- Maneuver
- Protection
- Sustainability

The MAF HQ has the same command and staff arrangement as a corps HQ. The two differences that give the MAF a distinct advantage are in the MAF commanders ability to Command both the ground and air elements of his force and in the extra intelligence/EW/CP capability that come with the MAW. Both of these advantages allow the MAF commander to

"... implement the [EAC] commander's will in pursuit of the unit's objective. The system [is] reliable, secure, fast, and durable. It collects, analyzes, and presents information rapidly. MAF C² communicates orders, coordinates support, and provides direction to its force in spite of enemy interference, destruction of command posts, or loss and replacement of commanders."³⁶

This superior C² brings with it the seeds of superior agility. Because the MAF commander can see, analyze, decide and direct his

force faster, a decision to change the main effort is effected quicker. Furthermore, as commander of both the MAW and the division coordination is cut to a minimum. Finally, any task organization changes can take place inside of one division and one air wing instead of possibly two divisions, a corps artillery HQ and an Air Force HQ. The Army ground assets may have some tactical agility during some specific missions, but the MAF will have operational agility at all times.

The MAW is the central component of MAF firepower. Those 108 jet aircraft bring with them the ability to deliver massive, accurate and timely destruction on any enemy force. The MAF does not have to wonder if it is going to get this firepower. Unless the CINC orders otherwise, the MAW supports the MAF at all times, under all conditions and in all locations. As proven in the Chosin Reservoir operation, the killing of 10,000 CCF soldiers by the air wing points to its effectiveness "...to defeat the enemy's ability and will to fight with destructive force."³⁷

When acting as an operational reserve during a sustained ground campaign, the MAF has the needed maneuverability to both "... gain advantage of position before battle and to exploit tactical successes to achieve operational results."³⁸ Although not considered part of this study, it must be remembered that amphibious maneuverability is one of the marines' main missions. Even a non-tactical move like the move from Inchon to Wonsan (Oct 1950) is usually faster than a ground move if the ports and shipping are available. On the ground the MAF can be moved quickly. The ground division's relative lack of heavy equipment means that it depends less on rail and road LOCs. Certainly,

some equipment and troops must be moved by ground, but an important amount can go by air. The same is true for the MAW. The MAW may not even need to displace all of its assets to support the operational move by the ground elements. Its fixed wing aircraft can support for hundreds of miles without any trouble. More importantly, the air wing can redeploy to a naval carrier as well as a land base. In Korea the wing switched back and forth from Korea to Japan to naval carriers as the ground situation required. Those options are alive and well today for Marine air. The HARRIERs have the ability to follow the division where ever it goes. Their STOL characteristics mean they are not tied to fixed airbases. The Air Force can not match either the extra dimension of carrier operations or STOL.

Once the battle is joined the MAF's airmobile/mechanized ground element can exploit the best of each element to attack enemy weakness. Meanwhile the MAW and ground unit together can fight the enemy, complementing each other's strengths.

The protection of the force is critical to a reserve. The enemy will try to locate and disrupt its marshalling, then delay its commitment and finally destroy as much of the reserve as possible. If a full Army corps is in reserve then it can do all the protection, except air, that a MAF can do. However, if only one or two divisions are in reserve then the MAF's air/ground team and rather small ground signature will better help protect it and other Army elements in its immediate area.

Without the total dedicated support of one or even two Air Force wings much of the firepower for an Army force (as compared to a MAF) must come from its ground systems. The closer units are to the FEBA

the harder they are to sustain because the logistics become more susceptible to enemy fires. Thus, to have the same amount of agility, firepower, maneuverability and protection an Army unit must be extremely large and consume more supplies. Even worse, the supplies must be pushed much further forward than those needed by the MAW. Certainly, the MAW consumes very large amounts of supplies, but it is also located much further to the rear where resupply can be made in bulk and other logistics functions conducted in a less hostile environment.

If the NCA makes the decision to commit a MAF to sustained ground operations the theater commander gains for two reasons. The first is that the MAF will arrive in shipping that it already is using (assault type) or has equipment/supplies stored aboard (MPS); this means that an operational reserve can be formed for a much lower shipping cost than if Army and Air Force units were forwarded to the theater. The second is that because three MABs are now at sea in MPS squadrons it is very likely that a MAF could be deployed to a theater quicker than an Army corps could be shipped overseas.

Should the MAF be available for commitment to sustained ground combat its use as an operational reserve for an EAC commander is an excellent use of its fighting capabilities. Its employment could well mean the difference between defeat or victory during the early stages of a war. With much of a potential MAF already loaded and at sea the possibility of a MAF fighting ashore for sustained periods grows as the defense budget shrinks.

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